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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/578,229

05/04/2006

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EXAMINER

KLEMANSKI, HELENE G

ART UNIT

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1793

MAIL DATE

DELIVERY MODE

06/02/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/578,229	Applicant(s) TAGUCHI ET AL.	
	Examiner Helene Klemanski	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/4/06 & 5/31/07</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Information Disclosure Statement

1. The references cited in the Search Reports dated January 25, 2005 and April 27, 2007 have been considered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 19 is considered confusing since it is dependent upon two different claims. The examiner suggests incorporating the black ink as defined in claim 1 into claim 19 to overcome this rejection.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

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F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1 and 3-7 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3, 5, 6, 8 and 11-15 of copending Application No. 10/511,318 (US 2005/0243151). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application overlap said copending claims and would be obvious thereby.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claims 1-7 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3, 6, 8-10 and 14 of U.S. Patent No. 7,303,272. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application overlap said patent claims and would be obvious thereby.

7. Claims 1-7 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 4, 5, 12 and 14 of U.S. Patent No. 7,048,790. Although the conflicting claims are not identical, they are not patentably

distinct from each other because the claims of the present application overlap said patent claims and would be obvious thereby.

8. Claims 1-7 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4-8 and 12 of U.S. Patent No.

7,211,133. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application overlap said patent claims and would be obvious thereby.

9. Claims 1 and 3-7 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 6 and 9 of U.S. Patent No.

7,273,519. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application overlap said patent claims and would be obvious thereby.

10. Claims 1-7 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 2 of U.S. Patent No. 7,267,715.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application overlap said patent claims and would be obvious thereby.

11. Claims 1 and 3-7 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 7,220,302.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application overlap said patent claims and would be obvious thereby.

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12. Claims 1-19 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4, 8 and 9 of U.S. Patent No. 7,208,035. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application overlap said patent claims and would be obvious thereby.

The only limitation in the claims not found by the examiner is the change ratio of an absorbance at λ_{max} in a visible region is 10% or less before and after the black ink is heated to reflux for 6 hours under a condition which water boils, wherein the absorbance is an absorbance of the black ink in a cell having an optical path length of 5 μm . However, this limitation is considered inherent because there does not appear to be any reason why the cited references would not contain a black ink with applicants claimed change ratio of an absorbance since the black ink of the above references comprises the exact same azo dyes as claimed by applicants.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

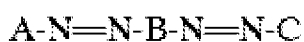
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

14. Claims 1 and 3-7 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 2003/306623 (English equivalent is US 2005/0243151).

JP 2003/306623 teaches an inkjet ink composition comprising an aqueous medium and an azo compound having an oxidation potential more positive than 0.8 V (vs SCE) and a λ_{max} as claimed by applicants (see para. 0098) of the formula



wherein A, B and C each independently represents an aromatic group that may be substituted or a heterocyclic group that may be substituted, A and C are monovalent groups and B is divalent group. The inkjet ink composition may further comprise a high-boiling organic solvent and has a pH of 6 to 10. See paras. 0017-0026, para. 0033, paras. 0062-0073, paras. 0080-0082, Table 1, paras. 0098-0099, para. 0106, para. 0113, paras. 0017-0122, example 1 and claims 1-3, 5, 6, 8 and 11-15 of US 2005/0243151. The inkjet ink composition as taught by JP 2003/306623 appears to anticipate the present claims.

15. Claims 1-7 are rejected under 35 U.S.C. 102(e) as being anticipated by WO 2004/029166 (English equivalent is US 7,303,272).

WO 2004/029166 teaches a black ink for ink jet recording comprising an aqueous medium and at least one dye in which λ_{max} of the absorption spectrum in an aqueous solution is in the region from 500 to 700 nm and the half-value width in the absorption spectrum of a dilute solution standardized to an absorbance of 1.0 is 100 nm or more and has an oxidation potential more positive than 1.0 V (vs SCE) of the formula



wherein A, B and C each independently represents an aromatic or heterocyclic group which may be substituted and m and n each represents 0 or an integer of 1 or more.

The black ink may further contain at least one dye having a λ_{max} of from 350 to 500 nm and a water-soluble organic solvent having a boiling point of 150 °C or more. The ink has a pH of from 4 to 11. See col. 2, line 66 – col. 3, line 14, col. 3, line 56 – col. 4, line 47, col. 5, lines 4-14, col. 6, lines 4-12, col. 7, lines 9-11, col. 7, line 57 – col. 8, line 5, col. 8, lines 22-67, col. 9, lines 1-16, col. 15, line 27 - col. 16, line 2, the dyes in col. 18- col. 32, col. 31, lines 41-43, col. 31, line 64 - col. 32, line 43, col. 40, lines 56-65, col. 42, lines 34-65, col. 47, lines 15-24, example 1, Table 1, example 2, Table 3, example 3, Table 5, example 4, Table 7, example 5, Table 9, example 6, Table 11, col. 66, lines 10-35 and claims 1-3, 6, 8-10 and 14 of US 7,303,272. The black ink composition as taught by WO 2004/029166 appears to anticipate the present claims.

16. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

17. Claims 1-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Taguchi et al. (US 7,048,790)

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Taguchi et al. teach a black ink for ink jet recording comprising an aqueous medium and at least one dye, wherein the dye has a λ_{max} of 500 to 700 nm and a half-value width 100 nm or more in an absorption spectrum of a dilute solution normalized to an absorbance of 1.0, has an oxidation potential more positive than 1.0 V (vs SCE) and has the formula



wherein A, B and C each independently represents an aromatic or heterocyclic group which are substituted or unsubstituted; m is 1 or 2 and n is an integer of 0 or more. The black ink may further contain at least one dye having a λ_{max} of from 350 to 500 nm and a water-soluble organic solvent having a boiling point of 150 °C or more. The ink has a pH of from 8 to 11. See col. 2, lines 44-67, col. 3, lines 24-30, col. 4, lines 21-36, col. 5, lines 20-40, col. 6, lines 21-22 and 46-58, col. 7, lines 7-65, col. 13, line 45 – col. 14, line 21, Tables 1-6, col. 29, line 64 – col. 30, line 66, col. 31, lines 1-11, col. 35, lines 12-19, col. 36, lines 15-23, col. 41, lines 8-17, Black Ink Bk-101, Table 7 and claims 1, 2, 4, 5, 12 and 14. The black ink composition as taught by Taguchi et al. appears to anticipate the present claims.

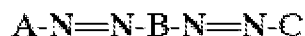
18. Claims 1-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Taguchi (US 7,211,133)

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art

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under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Taguchi teaches a black ink for ink jet recording comprising an aqueous medium and two or more kind of dyes, wherein at least one dye is a dye (L) having a λ_{max} of 500 to 700 nm and a half-value width 100 nm or more in an absorption spectrum of a dilute solution normalized to an absorbance of 1.0, has an oxidation potential more positive than 1.0 V (vs SCE) and has the formula



wherein A, B and C each independently represents an aromatic or heterocyclic group which may be substituted and at least one dye is a dye (S) having a λ_{max} of from 350 to 500 nm. The black ink may further contain a water-soluble organic solvent having a boiling point of 150 °C or more. The ink has a pH of from 4 to 11. See col. 2, lines 44-64, col. 3, lines 30-31, col. 4, lines 25-27, col. 5, lines 4-60, col. 6, lines 9-25, col. 7, lines 10-15, col. 7, line 55 – col. 8, line 3, col. 9, lines 8-65, col. 16, lines 20-62, the dyes in col. 18- col. 30, col. 30, lines 61-66, col. 102, lines 4-10, col. 102, line 53 – col. 103, line 25, col. 107, lines 50-53, col. 35, Black Ink Bk-101, Tables 31 and 32 and claims 1, 4-8 and 12. The black ink composition as taught by Taguchi appears to anticipate the present claims.

19. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

20. Claims 1 and 3-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Taguchi et al. (US 7,273,519)

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Taguchi et al. teach a black ink for ink jet recording comprising an aqueous medium and a dye, wherein the dye has a λ_{max} of 500 to 700 nm and a half-value width 100 nm or more in an absorption spectrum of a dilute solution normalized to an absorbance of 1.0, has an oxidation potential more positive than 1.0 V (vs SCE) and has the formula



wherein A, B and C each independently represents an aromatic group which may be substituted or a heterocyclic group which may be substituted, provided that at least one of A, B and C is a heterocyclic group that may be substituted. The black ink may further contain a water-soluble organic solvent having a boiling point of 150 °C or more. The ink has a pH of from 4 to 11. See col. 4, line 45 – col. 6, line 2, col. 12, line 33 – col. 13,

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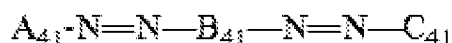
line 11, Tables 1-6, col. 142, line 47 – col. 143, line 19, col. 147, lines 40-44, Tables 32 and 33 and claims 1, 2, 6 and 9. The black ink composition as taught by Taguchi et al. appears to anticipate the present claims.

21. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

22. Claims 1-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Taguchi et al. (US 7,267,715)

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Taguchi et al. teach a black ink for ink jet recording comprising an aqueous medium and at least one dye, wherein the dye has a λ_{max} of 500 to 700 nm and a half-value width 100 nm or more in an absorption spectrum of a dilute solution normalized to an absorbance of 1.0, has an oxidation potential more positive than 1.0 V (vs SCE) and has the formula



wherein A_{41} , B_{41} and C_{41} each independently represents an aromatic group which may be substituted or a heterocyclic group which may be substituted. The black ink may

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further contain at least one dye having a λ_{max} of from 350 to 500 nm and a water-soluble organic solvent having a boiling point of 150 °C or more. The ink has a pH of from 8 to 11. See col. 1, lines 56-64, col. 3, lines 46-53, col. 117, lines 36-55, col. 119, lines 4-25, col. 119, line 33 – col. 120, line 32, col. 126, lines 37-56, the dyes in col. 128- col. 140, col. 141, lines 6-11, col. 145, line 48 – col. 146, line 16, col. 151, lines 55-63, Table 2; Ink Sets 105-110 and claims 1 and 2. The black ink composition as taught by Taguchi et al. appears to anticipate the present claims.

23. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

24. Claims 1-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Taguchi (US 7,220,302)

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Taguchi teaches a black ink for ink jet recording comprising an aqueous medium and at least one dye, wherein the dye has a λ_{max} of 500 to 700 nm and a half-value width 100 nm or more in an absorption spectrum of a dilute solution normalized to an

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absorbance of 1.0, has an oxidation potential more positive than 1.0 V (vs SCE) and has the formula



wherein A_{41} , A_{42} and A_{43} each independently represents an optionally substituted aromatic or heterocyclic group. The black ink may further contain at least one dye having a λ_{max} of from 350 to 500 nm and a water-soluble organic solvent having a boiling point of 150 °C or more. The ink has a pH of from 8 to 11. See col. 2, lines 15-18, col. 3, lines 50-55, col. 119, lines 30-47, col. 120, line 56 – col. 122, line 27, col. 128, line 33 – col. 129, line 33, col. 130, line 44, the dyes in col. 132- col. 160, col. 159, lines 64-66, col. 160, lines 60-62, col. 164, lines 31-36, col. 165, lines 14-53, col. 171, lines 3-11, Tables 1-10, 12 and 15 and claim 1. The black ink composition as taught by Taguchi appears to anticipate the present claims.

25. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

The only limitation in the claims not found by the examiner is the change ratio of an absorbance at λ_{max} in a visible region is 10% or less before and after the black ink is heated to reflux for 6 hours under a condition which water boils, wherein the absorbance is an absorbance of the black ink in a cell having an optical path length of 5 μ m. However, this limitation is considered inherent because there does not appear to be any reason why the above cited references would not contain a black ink with

applicants claimed change ratio of an absorbance since the black inks of the above references comprises the exact same azo dyes as claimed by applicants.

Claim Rejections - 35 USC § 103

26. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

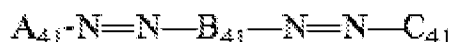
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

27. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being obvious over Ogawa et al. (US 7,208,035).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing

that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Ogawa et al. teach an ink set comprising at least two kinds of inks, each of the at least two kinds of inks having a common hue and different densities and each containing an aqueous medium and a dye wherein the dye has a λ_{max} of 500 to 700 nm and a half-value width 100 nm or more in an absorption spectrum of a dilute solution normalized to an absorbance of 1.0, has an oxidation potential more positive than 1.0 V (vs SCE) and has the formula



wherein A_{41} , B_{41} and C_{41} each independently represents an aromatic group which may be substituted or a heterocyclic group which may be substituted. See col. 2, lines 40-57, col. 5, line 37 – col. 6, line 11, col. 7, lines 12-14, col. 115, line 55 - col. 116, line 50, col. 117, line 33 - col. 118, line 38, col. 124, line 38 - col. 125, line 16, Tables 14-19, col. 139, lines 39-46, col. 143, lines 35-41 and claims 1-4, 8 and 9. Ogawa et al. fails to specifically exemplify an ink set comprising two black inks each having a different density as claimed by applicants.

Therefore, it would have been obvious to one having ordinary skill in the art to use the specific ink set comprising two black inks each having a different density as claimed by applicants as Ogawa et al. also discloses the use of these black inks having different densities but fails to show an example incorporating them.

28. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

With respect to claim 8, the only limitation in the claim not found by the examiner is that the lower density black ink has an ozone fastness stronger than that of the higher density black ink. However, this limitation is considered obvious because there does not appear to be any reason why the cited reference would not contain a lower density black ink with applicants claimed stronger ozone fastness since the black inks of the above reference comprises the exact same azo dyes as claimed by applicants.

With respect to claim 9, the only limitation in the claim not found by the examiner is that the at least two black inks satisfy the relationship as claimed. However, this limitation is considered obvious because there does not appear to be any reason why the cited reference would not contain at least two black inks satisfy the relationship as claimed since the black inks of the above reference comprises the exact same azo dyes as claimed by applicants.

With respect to claim 10, the only limitation in the claim not found by the examiner is that when with respect to each of the at least two black inks, a stepwise printing sample having a concentration pattern 15 steps up to 30 mL/m² at maximum is prepared and a reflection density in the concentration pattern is measured, a higher density black ink in the at least two black inks has a maximum value of reflection density higher than that a lower density black ink in the at least two black inks. However, this limitation is considered obvious because there does not appear to be any reason why

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the cited reference would not contain a higher density black ink with applicants claimed higher maximum value of reflection density since the black inks of the above reference comprises the exact same azo dyes as claimed by applicants.

With respect to claim 19, the only limitation in the claims not found by the examiner is the change ratio of an absorbance at λ_{max} in a visible region is 10% or less before and after the black ink is heated to reflux for 6 hours under a condition which water boils, wherein the absorbance is an absorbance of the black ink in a cell having an optical path length of 5 μm . However, this limitation is considered obvious because there does not appear to be any reason why the above cited references would not contain a black ink with applicants claimed change ratio of an absorbance since the black inks of the above references comprises the exact same azo dyes as claimed by applicants.

Conclusion

The remaining references listed on forms 892 and 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the above rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helene Klemanski whose telephone number is (571) 272-1370. The examiner can normally be reached on Monday-Friday 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Helene Klemanski/
Primary Examiner, Art Unit 1793